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Effective Date: November 15, 2008
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NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
WASTE DISCHARGE PERMIT No. WA 000085-0
(Simp-NPDES-PMT-2006-10.doc)

State of Washington
DEPARTMENT OF ECOLOGY
Olympia, Washington 98504-7600

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1342 et seq.

Simpson Tacoma Kraft Company, LLC
P.O. Box 2133
Tacoma, WA 98401

<u>Facility Location:</u> 801 Portland Avenue Tacoma, WA 98421	<u>Receiving Water:</u> Inner Commencement Bay
<u>Water Body I.D. No.:</u> 1224819475188	<u>Discharge Location:</u> Latitude: 47° 16' 06" Longitude: - 122° 25' 54"
<u>Industry Type:</u> Pulp and Paper Mill	

is authorized to discharge in accordance with the special and general conditions which follow.

Merley F. McCall
Industrial Section Supervisor
Washington State Department of Ecology

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SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S2.C	Flow Measurement Methods Summary	1/permit cycle, updates submitted as necessary	180 days after permit effective date
S3.A	Discharge Monitoring Report	Monthly	
S3.E	Noncompliance Notification	As necessary	
S3.F	Other Noncompliance Reporting	As necessary	
S4.A	Operations and Maintenance Manual Update or Review Confirmation Letter	Annually	6 months after permit effective date
S4.A	Treatment System Operating Plan	1/permit cycle, updates submitted as necessary	6 months after permit effective date
S4.B	Reporting Bypasses	As necessary	
S5.	Application for Permit Renewal	1/permit cycle	at least 180 days before permit expiration date
S6.	Facility Loading Notification	As necessary	
S7.C	Solid Waste Control Plan	1/permit cycle	with permit renewal application
S7.C	Modification of Solid Waste Plan	As necessary	
S8.	Non-routine and Unanticipated Discharges	As necessary	
S9.	Spill Control Plan	1/permit cycle, updates submitted as necessary	6 months after permit effective date
S10.	Best Management Practices Plan Update	1/permit cycle, updates submitted as necessary	6 months after permit effective date
S11.A	Mixing Zone Plan of Study	1/permit cycle	at least 30 days before study
S11.B	Effluent Mixing Report	1/permit cycle	4 th year of permit term
S12.	Acute Toxicity Effluent Test Results	2/permit cycle	with permit renewal application

Permit Section	Submittal	Frequency	First Submittal Date
S13.	Chronic Toxicity Effluent Test Results	2/permit cycle	with permit renewal application
S14.	Additional Chemical Analysis of Effluent	Annually	12 months after permit effective date
S15.	Outfall Evaluation	1/permit cycle	4 th year of permit term
S16	Stormwater Discharge Notification	As necessary	
G1.	Notice of Change in Signatory Authority	As necessary	
G4.	Permit Application for Substantive Changes to the Discharge	As necessary	
G5.	Engineering Report for Construction or Modification Activities	As necessary	
G7	Notice of Permit Transfer	As necessary	
G20	Reporting Anticipated Non-compliance	As necessary	
G21	Reporting Other Information	As necessary	

SPECIAL CONDITIONS

S1. DISCHARGE LIMITATIONS

In this permit the word “must” denotes an action that is mandatory and is equivalent to the word “shall” used in previous permits.

A. Process Wastewater Discharges

All discharges and activities authorized by this permit must be consistent with the terms and conditions of this permit.

The discharge of any of the following pollutants more frequently than, or at a level in excess of that identified and authorized by this permit is a violation of the terms and conditions of this permit.

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge at the permitted location subject to complying with the following limitations:

Outfall 001 Effluent Limits

Parameter	Average Monthly ^a	Maximum Daily ^b
BOD ₅ (lb/D)	9840	18780
TSS (lb/D)	16800	32570
AOX (lb/D) ^c	657 ^d	1004 ^e
pH ^f	continuous limit $5.2 \leq \text{pH} \leq 9.0$	

^a	The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
^b	The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a 24-hour mill day (8:00 am to 8:00 am the next day). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day.
^c	AOX is defined as adsorbable organic halides.
^d	The discharge is considered in compliance if the limit is exceeded, but the monthly average discharge rate is ≤ 1.246 lb/ton of pulp fed to the bleach plant.
^e	The discharge is considered in compliance if the limit is exceeded, but the daily discharge rate is ≤ 1.902 lb/ton of pulp fed to the bleach plant.

^f	Indicates the range of permitted values. Any excursions below 4.2 and above 10.0 at any time are violations. The instantaneous maximum and minimum pH must be reported monthly. When pH is continuously monitored, excursions between 4.2 and 5.2, or 9.0 and 10.0 are not be considered violations if no single excursion exceeds 60 minutes in length and total excursions do not exceed 7 hours and 30 minutes per month. The pH must not be averaged.
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Bleach Plant Effluent Limits

Parameter	Average Monthly ^a	Maximum Daily ^b
Chloroform (lb/D)	4.4	7.3
Tetrachlorocatechol		< 5.0 µg/L ^c
Tetrachloroguaiacol		< 5.0 µg/L ^c
Trichlorosyringol		< 2.5 µg/L ^c
4,5,6-trichloroguaiacol		< 2.5 µg/L ^c
3,4,6-trichlorocatechol		< 5.0 µg/L ^c
3,4,5-trichlorocatechol		< 5.0 µg/L ^c
3,4,5-trichloroguaiacol		< 2.5 µg/L ^c
2,3,4,6-tetrachlorophenol		< 2.5 µg/L ^c
3,4,6-trichloroguaiacol		< 2.5 µg/L ^c
Pentachlorophenol		< 5.0 µg/L ^c
2,4,6-trichlorophenol		< 2.5 µg/L ^c
2,4,5-trichlorophenol		< 2.5 µg/L ^c
2,3,7,8-TCDD ^d		< 10 pg/L ^c
2,3,7,8-TCDF ^d		31.9 pg/L

^a	The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
^b	The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a 24-hour mill day. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day.

^c	This concentration represents the minimum level (ML – as defined in 40 CFR 430.01(i)) for this pollutant. Analysis for the chlorinated phenolics must be conducted using EPA method 1653. An equivalent EPA-approved method can be substituted upon written authorization from Ecology. The Permittee must achieve a level less than or equal to that listed. For purposes of reporting, if a value is less than the minimum level, the Permittee must report the actual value detected. If a value is less than the method detection level, the Permittee must report less than the (<) numerical method detection level.
^d	TCDD is 2,3,7,8-tetrachlorodibenzo-p-dioxin and TCDF is 2,3,7,8-tetrachlorodibenzofuran.

B. Mixing Zone Descriptions

The maximum boundaries of the mixing zones for process water Outfall No. 001 are defined as follows:

Chronic Mixing Zone

WAC 173-201A-400(7)(b)(i) specifies mixing zones must not extend in any horizontal direction from the discharge ports for a distance greater than 200 feet plus the depth of water over the discharge ports as measured during mean lower low water (MLLW). Given a MLLW water depth of 57.5 feet for the Permittee's outfall, the horizontal distance therefore is 257 feet (68.6 meters). The mixing zone is a circle with radius of 257 feet measured from the center of each discharge port. The mixing zone extends from the seabed to the top of the water surface. Chronic aquatic life criteria and human health criteria must be met at the edge of the chronic zone.

The dilution factor at the edge of the chronic mixing zone is 87.

Acute Mixing Zone

WAC 173-201A-400(8)(b) specifies that in estuarine waters a zone where acute criteria may be exceeded must not extend beyond 10% of the distance established for the maximum or chronic zone as measured independently from the discharge ports. The acute mixing zone is a circle with radius of 26 feet that extends 26 feet in any spatial direction from each discharge port. Acute aquatic life criteria must be met at the edge of the acute zone.

The dilution factor at the edge of the acute mixing zone is 27.

S2. **MONITORING REQUIREMENTS**

The Permittee must monitor in accordance with the following schedule:

A. Monitoring Schedule

Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type ¹
BOD ₅	mg/l	2° Clarifier Effluent	4×/wk ²	24 hour composite
TSS	mg/l	2° Clarifier Effluent	4×/wk ²	24 hour composite
AOX ³	mg/l	2° Clarifier Effluent	4×/wk ²	24 hour composite
pH ⁴	SU	2° Clarifier Effluent	Continuous ⁵	Recording
COD	mg/l	2° Clarifier Effluent	1×/wk	24 hour composite
Temperature	Degrees	2° Clarifier Effluent	Continuous ⁵	Recording
Flow	MGD	2° Clarifier Effluent	Continuous ⁵	Recording
2,3,7,8-TCDD ⁶	pg/L	2° Clarifier Effluent	1×/qtr	24 hour composite
2,3,7,8-TCDF ⁶	pg/L	2° Clarifier Effluent	1×/qtr	24 hour composite
Pollutant Scan	--	2° Clarifier Effluent	1×/yr	(see S?)
Chloroform ⁷	ug/L	Bleach Plant Effluent	1×/mth ⁸	24 hour composite ⁹
Tetrachlorocatechol	ug/L	Bleach Plant Effluent	1×/qtr ¹⁰	24 hour composite
Tetrachloroguaiacol	ug/L	Bleach Plant Effluent	1×/qtr ¹⁰	24 hour composite
Trichlorosyringol	ug/L	Bleach Plant Effluent	1×/qtr ¹⁰	24 hour composite
4,5,6-trichloroguaiacol	ug/L	Bleach Plant Effluent	1×/qtr ¹⁰	24 hour composite
3,4,6-trichlorocatechol	ug/L	Bleach Plant Effluent	1×/qtr ¹⁰	24 hour composite
3,4,5-trichlorocatechol	ug/L	Bleach Plant Effluent	1×/qtr ¹⁰	24 hour composite
3,4,5-trichloroguaiacol	ug/L	Bleach Plant Effluent	1×/qtr ¹⁰	24 hour composite
2,3,4,6-tetrachlorophenol	ug/L	Bleach Plant Effluent	1×/qtr ¹⁰	24 hour composite
3,4,6-trichloroguaiacol	ug/L	Bleach Plant Effluent	1×/qtr ¹⁰	24 hour composite

Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type ¹
Pentachlorophenol	ug/L	Bleach Plant Effluent	1×/qtr ¹⁰	24 hour composite
2,4,6-trichlorophenol	ug/L	Bleach Plant Effluent	1×/qtr ¹⁰	24 hour composite
2,4,5-trichlorophenol	ug/L	Bleach Plant Effluent	1×/qtr ¹⁰	24 hour composite
2,3,7,8-TCDD ⁴	pg/L	Bleach Plant Effluent	1×/mth	24 hour composite
2,3,7,8-TCDF ⁴	pg/L	Bleach Plant Effluent	1×/mth	24 hour composite
BOD5	mg/l	Primary Clarifier Effluent ¹¹	Weekly	24 hour composite
TSS	mg/l	Primary Clarifier Effluent ¹¹	Weekly	24 hour composite
Flow	MGD	Non-contact Cooling Water Effluent	Continuous ⁵	Recording
Temperature	Degrees	Non-contact Cooling Water Effluent	Continuous ⁵	Recording
2,3,7,8-TCDD	pg/L	Sludge ¹²	2×/yr ¹³	grab
2,3,7,8-TCDF	pg/L	Sludge ¹²	2×/yr ¹³	grab
Production B1 (Subpart B - bleached market pulp)	ADT/D	Mill	Daily	24 hour
Production B2 (Subpart B - bleached kraft paperboard, coarse paper, & tissue paper)	ADT/D	Mill	Daily	24 hour
Production C (Subpart C - unbleached kraft)	ADT/D	Mill	Daily	24 hour
Production J (Subpart J - paperboard from wastepaper, corrugating medium furnish)	ADT/D	Mill	Daily	24 hour
Acute Toxicity Testing		Final Effluent ¹⁴	2×/5 yr	Composite (see S12)

Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type ¹
Chronic Toxicity Testing		Final Effluent ¹⁴	2×/5 yr	Composite (see S13)

- ¹ All samples must be maintained at proper temperature during collection for composite samples. All samples must be stored at proper temperature until analyzed.
- ² This represents a reduced sampling frequency. Sampling must be done so no more than two consecutive days occur between samples when sampling on 4×/wk frequency. When any two limit violations [Can we make this 2 separate events so it is not triggered by 2 or more days stemming from a single upset? We'd only apply it to BOD and TSS.] for a parameter occur in a 12 consecutive month period, monitoring frequency for that parameter reverts to daily. Any changes in sampling frequency must be noted in the monthly report for the month in which the changes occur.
- ³ Analysis must be conducted in accordance with Method 1650: Adsorbable Organic Halides by Adsorption and Coulometric Titration, Revision B, October, 1993. The Permittee must report date sampled, AOX concentration (ppm), effluent flow (MGD), AOX lb/D, and pulp fed daily to the bleach plant (ADT).
- ⁴ For facilities which continuously monitor and record pH values, the number of minutes the pH value was below or above the permitted range must be recorded for each day and the total minutes for the month reported, the durations when values were above and below the permitted range must be reported separately. The instantaneous maximum and minimum pH must be reported monthly.
- ⁵ Continuous means uninterrupted - except for brief lengths of time for calibration, power failure, or for unanticipated equipment repair or maintenance. Sampling must be done four times per day when continuous monitoring is not possible.
- ⁶ Analysis including sample containers and QA/QC must be conducted in accordance with Method 1613: Tetra- through Octa- Chlorinated Dioxins and Furans by Isotopic Dilution HRGC/HRMS, USEPA Office of Water, Engineering and Analysis Division, Revision A. The Permittee must achieve a minimum level of detection less than or equal to 10 pg/L.
- ⁷ Analysis for chloroform must be conducted in accordance with EPA Method 624 or equivalent. The Permittee must report date sampled, chloroform concentration (ppm), bleach plant effluent flow (MGD), chloroform lb/D, and pulp fed daily to the bleach plant (ADT).
- ⁸ This represents a reduced sampling frequency. When a limit violation occurs the monitoring frequency reverts to 1×/wk. Any changes in sampling frequency must be noted in the monthly report for the month in which the changes occur.
- ⁹ The twenty-four hour composite sampling for chloroform must consist of a minimum of four (4) individual samples collected during a twenty-four hour period and quantitatively composited in the laboratory. The Permittee must include a detailed description of the method used to composite the samples with the first report, and with subsequent reports where there is a modification of the compositing method. If an automated continuous or grab compositing device is used, the report must include a description of the system and the name of the manufacturer.

- 10 This represents a reduced sampling frequency. When a limit violation occurs for any chlorinated phenolic compound (Tetrachlorocatechol, Tetrachloroguaiacol, Trichlorosyringol, 4,5,6-trichloroguaiacol, 3,4,6-trichlorocatechol, 3,4,5-trichlorocatechol, 3,4,5-trichloroguaiacol, 2,3,4,6-tetrachlorophenol, 3,4,6-trichloroguaiacol, Pentachlorophenol, 2,4,6-trichlorophenol, and 2,4,5-trichlorophenol) the monitoring frequency for all chlorinated phenolic compounds reverts to 1×/mth. Any changes in sampling frequency must be noted in the monthly report for the month in which the changes occur.
- 11 Monitor primary clarifier effluent instead of UNOX influent to acknowledge condensate BOD and TSS loading not included in Condition F6. Sample may be time or flow weighted.
- 12 [
- 12 Sludge is defined as combined primary and secondary treatment and OCC sludge leaving the de-watering presses. Analysis of sludge samples and QA/QC, must be conducted in accordance with, Method 8290, Polychlorinated Dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by High-Resolution Gas Chromatography/High-Resolution Mass Spectrometry (HRGC/HRMS), SW-846, Test Methods for Evaluating Solid Waste, USEPA, Office of Solid Waste, September, 1994.
- 13 Effluent samples must be taken for TCDD and TCDF at the same time as the sludge samples. Sampling for TCDD and TCDF must also coincide with that for AOX.
- 14 Final effluent sample must be collected at a point after the 2° Clarifier Effluent and the Non-contact Cooling Water Effluent are combined.

B. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit must be representative of the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality.

Sampling and analytical methods used to meet the monitoring requirements specified in this permit must conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136.

C. Flow Measurement

The Permittee must select and use appropriate flow measurement devices and methods consistent with accepted scientific practices. The Permittee must install, calibrate, and maintain the flow devices. This work is necessary to ensure that the accuracy of the measurements is consistent with the accepted industry standard and the manufacturers recommendation for that type of device. The Permittee must perform calibration at the frequency recommended by the manufacturer and at a minimum frequency of at least one calibration per year. The Permittee must maintain calibration records for at least three years.

Within 180 days of permit issuance the Permittee must submit a summary of the flow measurement methods including:

point(s) of measurement,
method of measurement at each point,
scheduled calibration frequency for each meter, and
calculation method to determine flow.

D. Laboratory Accreditation

All monitoring data required by Ecology must be prepared by a laboratory registered or accredited under the provisions of, *Accreditation of Environmental Laboratories*, Chapter 173-50 WAC. Flow, temperature, settleable solids, conductivity, pH, turbidity, and internal process control parameters are exempt from this requirement. Conductivity and pH must be accredited if the laboratory must otherwise be registered or accredited. Ecology exempts crops, soils, and hazardous waste data from this requirement pending accreditation of laboratories for analysis of these media.

S3. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee must monitor and report in accordance with the following conditions. The falsification of information submitted to Ecology is a violation of the terms and conditions of this permit.

A. Reporting

The first monitoring period begins on the effective date of the permit. Monitoring results must be submitted monthly. Monitoring data obtained during each monitoring period must be summarized, reported, and submitted on a Discharge Monitoring Report (DMR) form provided, or otherwise approved, by Ecology. In addition, a summary sheet, listing daily results for the parameters tabulated in Special Condition S1, including MDLs, and QLs (when applicable), must be submitted to Ecology. DMR forms must be postmarked or received no later than the 15th day of the month following the completed monitoring period, unless otherwise specified in this permit. Priority pollutant analysis data must be submitted no later than sixty (60) days following the monitoring period. Unless otherwise specified, all toxicity test data must be submitted within sixty (60) days after the sample date. The report(s) must be sent to:

Department of Ecology
Industrial Section
P. O. Box 47600
Olympia, WA 98504-7600

All laboratory reports providing data for organic and metal parameters must include the following information: sampling date, sample location, date of analysis, parameter name, CAS number, analytical method/number, method detection limit (MDL), laboratory practical quantitation limit (PQL), reporting units, and concentration detected. Analytical results from samples sent to a contract laboratory must have information on the chain of custody, the analytical method, QA/QC results, and documentation of accreditation for the parameter.

Discharge Monitoring Report forms must be submitted monthly whether or not the facility was discharging. If there was no discharge during a given monitoring period,

submit the form as required with the words "no discharge" entered in place of the monitoring results.

B. Records Retention

The Permittee must retain records of all monitoring information for a minimum of three (3) years. Such information must include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. This period of retention must be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Director.

C. Recording of Results

For each measurement or sample taken, the Permittee must record the following information:

- (1) the date, exact place, method, and time of sampling or measurement;
- (2) the individual who performed the sampling or measurement;
- (3) the dates the analyses were performed;
- (4) the individual who performed the analyses;
- (5) the analytical techniques or methods used; and
- (6) the results of all analyses.

D. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit using test procedures specified by Condition S2. of this permit, then the results of this monitoring must be included in the calculation and reporting of the data submitted in the Permittee's DMR.

E. Notice of Noncompliance Reporting

The Permittee must take the following action upon violation of any permit condition:

Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the noncompliance and correct the problem and, if applicable, immediately repeat sampling and analysis. The results of any repeat sampling must be submitted to Ecology within 30 days of sampling.

1. Immediate Noncompliance Notification

Any discharge of untreated wastewater must be reported immediately to the Department of Ecology's Regional Office 24-hr. number (360)407-6300.

The Permittee must also notify the Industrial Section permit manager by telephone. Outside of normal working hours, a voice mail notification to the Industrial Section permit manager or their designated backup will meet this requirement.

2. Twenty four hour Noncompliance Notification

The Permittee must report the following occurrences of noncompliance by telephone, to the Ecology permit manager, within 24 hours from the time the Permittee becomes aware of any of the following circumstances:

- a. any noncompliance that may endanger health or the environment, unless previously reported under subpart 1. above,
- b. any unanticipated **bypass** that exceeds any effluent limitation in the permit (See Part S4.B., "Bypass Procedures");
- c. any **upset** that exceeds any effluent limitation in the permit (See G.15, "Upset");
- d. any violation of a maximum daily or instantaneous maximum discharge limitation for any of the pollutants in Section S1.A. of this permit; or
- e. any overflow which is discharged or otherwise goes off site prior to passing through the treatment works, whether or not such overflow endangers health or the environment or exceeds any effluent limitation in the permit.

3. Report Within Five Days

The Permittee must also provide a written submission within five days of the time that the Permittee becomes aware of any event required to be reported under subparts 1 or 2, above. The written submission must contain:

- a. a description of the noncompliance and its cause;
- b. the period of noncompliance, including exact dates and times;
- c. the estimated time noncompliance is expected to continue if it has not been corrected;
- d. steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance; and
- e. if the non compliance involves an overflow prior to the treatment works, an estimate of the quantity (in gallons) of untreated overflow.

4. Waiver of Written Reports

Ecology may waive the written report required in subpart 3 above on a case-by-case basis upon request if a timely oral report has been received.

5. Report Submittal

Reports must be submitted to the address in S3. ("REPORTING AND RECORDKEEPING REQUIREMENTS").

F. Other Noncompliance Reporting

The Permittee must report all instances of noncompliance, not required to be reported immediately or within 24 hours, at the time that monitoring reports for S3.A ("Reporting") are submitted. The reports must contain the information listed in paragraph E.3. above. Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

This section describes NPDES reporting requirements, but does not include specific reporting requirements for oil or hazardous materials spills. At the time of permit issuance, specific reporting requirements for oil or hazardous materials spills were posted at the following website:

<http://www.ecy.wa.gov/programs/spills/other/reportaspill.htm>

G. Maintaining a Copy of This Permit

A copy of this permit must be kept at the permitted facility and be made available upon request to Ecology inspectors.

S4. OPERATION AND MAINTENANCE

The Permittee must, at all times, properly operate and maintain all facilities or systems of treatment and control (and related appurtenances) which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

A. Operations and Maintenance Manual

The Permittee must update the Operation and Maintenance (O&M) Manual within 6 months of the effective date of this permit and must notify Ecology when the update is complete. It must conform to the requirements of WAC 173-240-150. The O&M Manual must be available for Ecology inspection upon request.

A Treatment System Operating Plan (TSOP) must be submitted to Ecology as the initial chapter of the updated O&M Manual. This chapter must be entitled the "Treatment System Operating Plan." For the purposes of this NPDES permit, a TSOP is a concise summary of specifically defined elements of the O&M Manual. The TSOP must not conflict with the O&M Manual and must include the following information:

1. A baseline operating condition, which describes the operating parameters and procedures, used to meet the effluent limitations of S1. at the production levels used in developing these limitations.
2. In the event of production rates, which are below the baseline levels used to establish these limitations, the plan must describe the operating procedures and conditions needed to maintain design treatment efficiency. The monitoring and reporting must be described in the plan.
3. In the event of an upset, due to plant maintenance activities, severe stormwater events, start ups or shut downs, or other causes, the plan must describe the operating procedures and conditions employed to mitigate the upset. The monitoring and reporting must be described in the plan.
4. A description of any regularly scheduled maintenance or repair activities at the facility which would affect the volume or character of the wastes discharged to the wastewater treatment system and a plan for monitoring and treating/controlling the discharge of maintenance-related materials (such as cleaners, degreasers, solvents, etc.).

The O&M Manual must be reviewed by the Permittee at least annually and the Permittee must confirm this review by letter to Ecology. The Permittee must notify Ecology of any substantial changes or updates to the O&M Manual within 30 days after they are incorporated into the manual.

The Operations and Maintenance Manual must be kept available at the permitted facility and all operators are responsible for being familiar with, and using, this manual.

B. Bypass Procedures

Bypass, which is the intentional diversion of waste streams from any portion of a treatment facility, is prohibited, and Ecology may take enforcement action against a Permittee for bypass unless one of the following circumstances (1, 2, or 3) is applicable.

1. Bypass for Essential Maintenance without the Potential to Cause Violation of Permit Limits or Conditions.

Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health as determined by Ecology prior to the bypass. The Permittee must submit prior notice, if possible, at least ten (10) days before the date of the bypass.

2. Bypass which is Unavoidable, Unanticipated, and Results in Noncompliance of this Permit.

This bypass is permitted only if:

- a. Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.
 - b. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment downtime (but not if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance), or transport of untreated wastes to another treatment facility.
 - c. Ecology is properly notified of the bypass as required in condition S3E of this permit.
3. Bypass which is Anticipated and has the Potential to Result in Noncompliance of this Permit.

The Permittee must notify Ecology at least thirty (30) days before the planned date of bypass. The notice must contain (1) a description of the bypass and its cause; (2) an analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing; (3) a cost-effectiveness analysis of alternatives including comparative resource damage assessment; (4) the minimum and maximum duration

of bypass under each alternative; (5) a recommendation as to the preferred alternative for conducting the bypass; (6) the projected date of bypass initiation; (7) a statement of compliance with SEPA; (8) a request for modification of water quality standards as provided for in WAC 173-201A-410, if an exceedence of any water quality standard is anticipated; and (9) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.

For probable construction bypasses, the need to bypass is to be identified as early in the planning process as possible. The analysis required above must be considered during preparation of the engineering report or facilities plan and plans and specifications and must be included to the extent practical. In cases where the probable need to bypass is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the bypass.

Ecology will consider the following prior to issuing an administrative order for this type bypass:

- a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
- b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
- c. If the bypass is planned and scheduled to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, Ecology will approve or deny the request. The public must be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by Ecology under RCW 90.48.120.

C. Duty to Mitigate

The Permittee is required to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

D. Tank and Process Vessel Maintenance

The Permittee is authorized to discharge tank and vessel residuals to the process sewers and waste treatment system for the purposes of maintaining process equipment and making product grade changes as long as the discharge limits for the facility in S1.A are not exceeded. Tank or vessel contents shall be minimized to the extent practicable prior to any such discharge.

S5. APPLICATION FOR PERMIT RENEWAL

The Permittee must submit an application for renewal of this permit by at least 180 days prior to the expiration date of this permit.

S6. FACILITY LOADING

Design Criteria

Flows or waste loadings (average of three (3) consecutive months of UNOX influent flow or loading) must not exceed the following design criteria:

Parameter	Design Criteria
Monthly average flow	34 MGD
BOD ₅ influent loading	64,287 lb/D

The Permittee must notify Ecology if the UNOX secondary treatment system flow or waste loading (average of three (3) consecutive months) exceed 95% of the design criteria. The notification must include a plan and schedule to evaluate:

- Reducing wastewater treatment plant load, and/or
- Increasing wastewater treatment plant capacity, and/or
- Re-evaluating wastewater treatment plant capacity.

S7. SOLID WASTE DISPOSAL

A. Solid Waste Handling

The Permittee must handle and dispose of all solid waste material in such a manner as to prevent its entry into state ground or surface water.

B. Leachate

The Permittee must not allow leachate from its solid waste material to enter state waters without providing all known, available and reasonable methods of treatment, nor allow such leachate to cause violations of the State Surface Water Quality Standards, Chapter 173-201A WAC, or the State Ground Water Quality Standards, Chapter 173-200 WAC. The Permittee must apply for a permit or permit modification as may be required for such discharges to state ground or surface waters.

C. Solid Waste Control Plan

The Permittee must submit all proposed revisions or modifications to the solid waste control plan to Ecology for review and approval at least 30 days prior to implementation. Once approved, the Permittee must comply with any plan modifications. The Permittee must submit an update of the solid waste control plan along with the permit renewal application.

S8. NON-ROUTINE AND UNANTICIPATED DISCHARGES

- A. Beginning on the effective date of this permit, the Permittee may discharge non-routine wastewater on a case-by-case basis if approved by Ecology. Prior to any such discharge, the Permittee must contact Ecology and **at a minimum** provide the following information:

1. The nature of the activity that is generating the discharge.

2. Any alternatives to the discharge, such as reuse, storage, or recycling of the water.
 3. The total volume of water expected to be discharged.
 4. The results of the chemical analysis of the water. The water must be analyzed for all constituents limited for the Permittee's discharge. The analysis must also include hardness, any metals that are limited by water quality standards, and any other parameter deemed necessary by Ecology. All discharges must comply with the effluent limitations as established in Condition S1. of this permit, water quality standards, sediment management standards, and any other limitations imposed by Ecology.
 5. The date of proposed discharge and the rate at which the water will be discharged, in gallons per minute. The discharge rate must be limited to that which will not cause erosion of ditches or structural damage to culverts and their entrances or exits.
 6. If the proposed discharge is to a municipal storm drain and is approved by Ecology, the Permittee must notify the municipality of the discharge.
- B. The discharge cannot proceed until Ecology has reviewed the information provided and has authorized the discharge. Authorization from Ecology will be by letter to the Permittee or by an Administrative Order.

S9. SPILL CONTROL PLAN

The Permittee must, within six months after the effective date of the permit, submit to Ecology an update to the existing Spill Control Plan for the prevention, containment, and control of spills or unplanned discharges of:

- 1) Oil and petroleum products,
- 2) Materials, which when spilled, or otherwise released into the environment, are designated Dangerous (DW) or Extremely Hazardous Waste (EHW) by the procedures set forth in WAC 173-303-070, or
- 3) Other materials which may become pollutants or cause pollution upon reaching state's waters.

Ecology will accept evidence of a submitted Oil Spill Contingency Plan (required by Chapter 173-181 WAC) and an Oil Spill Prevention Plan (required by Chapter 173-180D WAC) to meet the oil and petroleum products portion of the Spill Control Plan.

The Permittee must review and update the Spill Control Plan, as needed, at least annually. Changes to the plan must be sent to Ecology. The Permittee must follow the plan and any supplements throughout the term of the permit.

The updated Spill Control Plan must include the following:

- A description of the reporting system which will be used to alert responsible managers and legal authorities in the event of a spill.
- A description of preventive measures and facilities (including an overall facility plot showing drainage patterns) which prevent, contain, or treat spills of these materials.

- A list of all oil and chemicals used, processed, or stored at the facility which may be spilled into state waters.

For the purpose of meeting this requirement, plans and manuals, or portions thereof, required by 33 CFR 154, 40 CFR 109, 40 CFR 110, 40 CFR Part 112, the Federal Oil Pollution Act of 1990, Chapter 173-181, and contingency plans required by Chapter 173-303 WAC may be submitted.

S10. BEST MANAGEMENT PRACTICES

The Permittee must, in accordance with 40 CFR Part 430.03, develop and implement a plan defining Best Management Practices (BMPs) to prevent spills and leaks of spent pulping liquors, turpentine, and soap which may reach the wastewater treatment system and adversely impact the system's performance. The plan must focus on prevention measures as a first priority to insure to the extent possible that leaks or spills do not occur. In the event that a significant leak or spill does occur, the plan must provide, where necessary, for containment and diversions of the regulated substance to protect the integrity of the wastewater treatment system. The BMP plan must conform with the plan requirements set forth in 40 CFR Part 430.03.

The Permittee must review and update (as necessary) the BMP within 6 months of the effective date of this permit and must notify Ecology when it has completed the review and update.

The Permittee must submit an annual report to Ecology meet the requirements of 40 CFR Part 430.03(i)(4) by February 14th of each year.

A copy of this plan must be kept at the permitted facility and be made available upon request to Ecology inspectors.

S11. EFFLUENT MIXING STUDY

A. General Requirements

The Permittee must determine the degree of effluent and receiving water mixing which occurs within the mixing zone (as defined in permit condition S1.B). The degree of mixing must be determined during critical conditions, as defined in WAC 173-201A-020 Definitions-“Critical Condition,” or as close to critical conditions as reasonably possible.

The critical condition scenarios must be established in accordance with *Guidance for Conducting Mixing Zone Analyses* (Ecology, 1996 - most recent version). The dilution ratio must be measured in the field with dye using study protocols specified in the *Guidance*, section 5.0 “Conducting a Dye Study,” as well as other protocols listed in subpart C. Protocols. The use of mixing models is an acceptable alternative or adjunct to a dye study if the critical ambient conditions necessary for model input are known or will be established with field studies; and if the diffuser is visually inspected for integrity or has been recently tested for performance by the use of tracers. The *Guidance* mentioned above must be consulted when choosing the appropriate model. The use of models is also required if critical condition scenarios that need to be examined are quite different from the set of conditions present during the dye study.

Validation (and possibly calibration) of a model may be necessary and must be done in accordance with the *Guidance* mentioned above - in particular subsection 5.2 “Quantify Dilution.” The resultant dilution ratios for acute and chronic boundaries must be applied in accordance with directions found in Ecology’s *Permit Writer’s Manual* (Ecology publication 92-109, most current version) - in particular Chapter VI.

A Plan of Study must be submitted to Ecology for review 30 days prior to initiation of the effluent mixing study.

B. Reporting Requirements

If the Permittee has information on the background physical conditions or background concentration of chemical substances (for which there are criteria in Chapter 173-201A WAC) in the receiving water, this information must be submitted to Ecology as part of the Effluent Mixing Report.

The results of the effluent mixing study must be included in the Effluent Mixing Report, which must be submitted to Ecology for approval prior to conducting the WET tests required in sections S.12 and S.13 of this permit. Any revisions to the dilution factors must be considered when selecting WET test dilutions.

If the results of the mixing study, toxicity tests, and chemical analysis indicate that the concentration of any pollutant(s) exceeds or has a reasonable potential to exceed the State Water Quality Standards, Chapter 173-201A WAC, Ecology may issue a regulatory order to require a reduction of pollutants or modify this permit to impose effluent limitations to meet the Water Quality Standards.

The Permittee must use some method of fixing and reporting the location of the outfall and mixing zone boundaries (i.e Global Positioning System (GPS) coordinates). The method and accuracy of fixing station location and the actual station locations must be identified in the report.

C. Protocols

The Permittee must determine the dilution ratio using protocols outlined in the following references, approved modifications thereof, or by another method approved by Ecology:

-Akar, P.J. and G.H. Jirka, *Cormix2: An Expert System for Hydrodynamic Mixing Zone Analysis of Conventional and Toxic Multiport Diffuser Discharges*, USEPA Environmental Research Laboratory, Athens, GA, Draft, July 1990.

-Baumgartner, D.J., W.E. Frick, P.J.W. Roberts, and C.A. Bodeen, *Dilution Models for Effluent Discharges*, USEPA, Pacific Ecosystems Branch, Newport, OR, 1993.

-Doneker, R.L. and G.H. Jirka, *Cormix1: An Expert System for Hydrodynamic Mixing Zone Analysis of Conventional and Toxic Submerged Single Port Discharges*, USEPA, Environmental Research Laboratory, Athens, GA. EPA/600-3-90/012, 1990.

-Ecology, *Permit Writer's Manual*, Water Quality Program, Department of Ecology, Olympia WA 98504, July 1994, including most current addenda.

-Ecology, *Guidance for Conducting Mixing Zone Analyses*, Permit Writer's Manual, (Appendix 6.1), Water Quality Program, Department of Ecology, Olympia WA 98504, October, 2002.

-Kilpatrick, F.A., and E.D. Cobb, Measurement of Discharge Using Tracers, Chapter A16, *Techniques of Water-Resources Investigations of the USGS, Book 3, Application of Hydraulics*, USGS, U.S. Department of the Interior, Reston, VA, 1985.

-Wilson, J.F., E.D. Cobb, and F.A. Kilpatrick, Fluorometric Procedures for Dye Tracing, Chapter A12, *Techniques of Water-Resources Investigations of the USGS, Book 3, Application of Hydraulics*, USGS, U.S. Department of the Interior. Reston, VA, 1986.

S12. ACUTE TOXICITY

The Permittee must:

- Conduct acute toxicity testing on final effluent once in the last winter (winter 2012) and once in the last summer (summer 2012) prior to submission of the application for permit renewal.
- Submit the results to Ecology with the permit renewal application.
- Conduct acute toxicity testing on a series of at least five concentrations of effluent, including 100% effluent, and a control.
- Use each of the following species and protocols for each acute toxicity test:
 1. Fathead minnow, *Pimephales promelas* (96-hour static-renewal test, method: EPA-821-R-02-012).
 2. Rainbow trout, *Oncorhynchus mykiss* (96-hour static-renewal test, method: EPA-821-R-02-012).

Sampling and Reporting Requirements

1. The Permittee must submit all reports for toxicity testing in accordance with the most recent version of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. Reports must contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data in electronic format for entry into Ecology's database, then the Permittee must send the data to Ecology along with the test report, bench sheets, and reference toxicant results.
2. The Permittee must collect 24-hour composite effluent samples (with a minimum of four (4) individual samples) for toxicity testing. The Permittee must cool the samples to 0 - 6 degrees Celsius during collection and send them to the lab immediately upon completion. The lab must begin the toxicity testing as soon as possible but no later than 36 hours after sampling was completed.

3. The laboratory must conduct water quality measurements on all samples and test solutions for toxicity testing, as specified in the most recent version of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*.
4. All toxicity tests must meet quality assurance criteria and test conditions specified in the most recent versions of the EPA methods and Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If Ecology determines any test results to be invalid or anomalous, the Permittee must repeat the testing with freshly collected effluent.
5. The laboratory must use control water and dilution water meeting the requirements of the EPA methods or pristine natural water of sufficient quality for good control performance.
6. The Permittee must conduct whole effluent toxicity tests on an unmodified sample of final effluent.

S13. CHRONIC TOXICITY

The Permittee must:

- Conduct chronic toxicity testing on final effluent once in the last winter (winter 2012) and once in the last summer (summer 2012) prior to submission of the application for permit renewal.
- Submit the results to Ecology with the permit renewal application.
- Conduct chronic toxicity testing on a series of at least five concentrations of effluent and a control. This series of dilutions must include the acute critical effluent concentration (ACEC). The ACEC equals 3.7% effluent.
- Compare the ACEC to the control using hypothesis testing at the 0.05 level of significance as described in Appendix H, EPA/600/4-89/001.

Perform chronic toxicity tests with all of the following species and the most recent version of the following protocols:

Saltwater Chronic Test	Species	Method
Topsmelt survival and growth	<i>Atherinops affinis</i>	EPA/600/R-95/136
Oyster/ Mussel Survival and development	<i>Crassostrea gigas</i> / <i>Mytilus sp.</i>	EPA/600/R-95/136 ^a
Sea urchin/ Sand dollar fertilization	<i>Strongylocentrotus purpuratus</i> / <i>Dendraster excentricus</i>	EPA/600/R-95/136 ^b

^a The laboratory must conduct the Pacific oyster and mussel tests in accordance with EPA/600/R-95/136 and the bivalve development test conditions in the most recent version of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. The laboratory must use whichever one of the two species that will give a valid result in each particular test.

- ^b The laboratory must conduct the sea urchin and sand dollar (echinoderm) test in accordance with EPA/600/R-95/136 and the echinoderm fertilization test conditions in the most recent version of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. The laboratory must use whichever one of the two species that will give a valid result in each particular test.

Sampling and Reporting Requirements

1. The Permittee must submit all reports for toxicity testing in accordance with the most recent version of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. Reports must contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data in electronic format for entry into Ecology's database, then the Permittee must send the data to Ecology along with the test report, bench sheets, and reference toxicant results.
2. The Permittee must collect 24-hour composite effluent samples (with a minimum of four (4) individual samples) for toxicity testing. The Permittee must cool the samples to 0 - 6 degrees Celsius during collection and send them to the lab immediately upon completion. The lab must begin the toxicity testing as soon as possible but no later than 36 hours after sampling was completed.
3. The laboratory must conduct water quality measurements on all samples and test solutions for toxicity testing, as specified in the most recent version of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*.
4. All toxicity tests must meet quality assurance criteria and test conditions specified in the most recent versions of the EPA methods and Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If Ecology determines any test results to be invalid or anomalous, the Permittee must repeat the testing with freshly collected effluent.
5. The laboratory must use control water and dilution water meeting the requirements of the EPA methods or pristine natural water of sufficient quality for good control performance.
6. The Permittee must conduct whole effluent toxicity tests on an unmodified sample of final effluent.

S14. ADDITIONAL CHEMICAL ANALYSIS OF EFFLUENT

Effluent Analysis

The Permittee must collect additional effluent information to determine if the effluent has a reasonable potential to cause a violation of the water quality standards. If reasonable potential exists, Ecology will use this information to calculate effluent limits. All sampling and analysis must be conducted in accordance with the guidelines

given in *Guidelines for Preparing Quality Assurance Project Plans for Environmental Studies* (Ecology Publication 04-03-030).

The Permittee must annually sample the final effluent and analyze the sample for the priority pollutants and other pollutants listed in the table below. The detection limit and the method must conform to those included in the table. Analytical Protocols are EPA Part 136 methods or Standard Methods. Alternative methods may be used with prior Ecology approval.

The Permittee must use the clean sampling guidance for collection of metals samples. Effluent samples must be collected as either grab or 24 hour composite samples as appropriate.

Pollutant	CAS Number (if available)	Analytical Protocol	Detection or Quantitation Level
Metals, Cyanide & Total Phenols (Part C)			DL µg/l
Antimony, Total	7440-36-0	200.8	3
Arsenic, Total	7440-38-2	200.8	1
Beryllium, Total	7440-43-9	200.8	1
Cadmium, Total	7440-43-9	200.8	0.1
Chromium, Total	7440-47-3	200.8	1
Copper, Total	7440-50-8	200.8	1
Lead, Total	7439-92-1	200.8	1
Mercury, Total	7439-97-6	1631	0.2 ng/l
Nickel, Total	7440-02-0	200.8	1
Selenium, Total	7782-49-2	200.8	2
Silver, Total	7440-22-4	200.8	0.2
Thallium, Total	7440-28-0	200.8	1
Zinc, Total	7440-66-6	200.8	0.5
Cyanide, Total *	57-12-5	335.4	20
Phenols, total		420.1 or 420.2	
Dioxin			QL µg/l
2,3,7,8-Tetra-Chlorodibenzo-P-Dioxin	1764-01-6	1613	0.00001
Volatile Compounds			QL µg/l
Acrolein	107-02-8	624	50
Acrylonitrile	107-13-1	624	50
Benzene	71-43-2	624	10
Bis (chloromethyl) Ether	542-88-1	624	10

Pollutant	CAS Number (if available)	Analytical Protocol	Detection or Quantitation Level
Bromoform	75-25-2	624	10
Carbon Tetrachloride	56-23-5	624	10
Chlorobenzene	108-90-7	624	50
Chlorodibromomethane	124-48-1	624	10
Chloroethane	75-00-3	624	10
2-Chloroethylvinyl Ether	110-75-8	624	50
Chloroform	67-66-3	624	10
Dichlorobromomethane	75-27-4	624	10
Dichlorodifluoromethane	75-71-8	624	10
1,1-Dichloroethane	75-34-3	624	10
1,2-Dichloroethane	107-06-2	624	10
1,1-Dichloroethylene	75-35-4	624	10
1,2-Dichloropropane	78-87-5	624	10
1,3-Dichloropropylene	542-75-6	624	10
Ethylbenzene	100-41-4	624	10
Methyl Bromide	74-83-9	624	50
Methyl Chloride	74-87-3	624	50
Methylene Chloride	75-09-2	624	20
1,1,2,2-Tetrachloroethane	79-34-5	624	10
Tetrachloroethylene	127-18-4	624	10
Toluene	108-88-3	624	10
1,2-Trans-Dichloroethylene	156-60-5	624	10
1,1,1-Trichloroethane	71-55-6	624	10
1,1,2-Trichloroethane	79-00-5	624	10
Trichloroethylene	79-01-6	624	10
Trichlorofluoromethane	75-69-4	624	10
Vinyl Chloride	75-01-4	624	10
Acid Compounds			QL µg/l
2-Chlorophenol	95-57-8	625	10
2,4-Dichlorophenol	120-83-2	625	10
2,4-Dimethylphenol	105-67-9	625	10
4,6-Dinitro-O-Cresol (2-methyl-4,6 – dinitrophenol)	534-52-1	625	50
2,4 Dinitrophenol	51-28-5	625	50
2-Nitrophenol	88-75-5	625	20
4-Nitrophenol	100-02-7	625	50
P-Chloro-M-Cresol	59-50-7	625	10
Pentachlorophenol	87-86-5	625	50
Phenol	108-95-2	625	10

Pollutant	CAS Number (if available)	Analytical Protocol	Detection or Quantitation Level
2,4,6-Trichlorophenol	88-06-2	625	10
Base/Neutral Compounds			QL µg/l
Acenaphthene	83-32-9	625	10
Acenaphthylene	208-96-8	625	10
Anthracene	120-12-7	625	10
Benzidine	92-87-5	625	50
Benzo (a) Anthracene	56-55-3	625	10
Benzo (a) Pyrene	50-32-8	625	10
3,4-Benzofluoranthene	205-99-2	625	10
Benzo (ghi) Perylene	191-24-2	625	20
Benzo (k) Fluoranthene	207-08-9	625	10
Bis (2-Chloroethoxy) Methane	111-91-1	625	10
Bis (2-Chloroethyl) Ether	111-44-4	625	10
Bis (2-Chloroisopropyl) Ether	108-60-1	625	10
Bis (2-Ethylhexyl) Phthalate	117-81-7	625	10
4-Bromophenyl Phenyl Ether	101-55-3	625	10
Butyl Benzyl Phthalate	85-68-7	625	10
Base/Neutral Compounds			QL µg/l
2-Chloronaphthalene	91-58-7	625	10
4-Chlorophenyl Phenyl Ether	7005-72-3	625	10
Chrysene	218-01-9	625	10
Dibenzo (a,h) Anthracene	53-70-3	625	20
1,2-Dichlorobenzene	95-50-1	625	10
1,3-Dichlorobenzene	541-73-1	625	10
1,4-Dichlorobenzene	106-46-7	625	10
3,3'-Dichlorobenzidine	91-94-1	625	50
Diethyl Phthalate	84-66-2	625	10
Dimethyl Phthalate	131-11-3	625	10
Di-N-Butyl Phthalate	84-74-2	625	10
2,4-Dinitrotoluene	121-14-2	625	10
2,6-Dinitrotoluene	606-20-2	625	10
Di-n-octyl Phthalate	117-84-0	625	10
1,2-Diphenylhydrazine (<i>as</i> <i>Azobenzene</i>)	122-66- 7	625	20
Fluoranthene	206-44-0	625	10
Fluorene	86-73-7	625	10
Hexachlorobenzene	118-74-1	625	10

Pollutant	CAS Number (if available)	Analytical Protocol	Detection or Quantitation Level
Hexachlorobutadiene	87-68-3	625	10
Hexachlorocyclopentadiene	77-47-4	625	10
Hexachloroethane	67-72-1	625	20
Indeno (1,2,3- <i>cd</i>) Pyrene	193-39-5	625	20
Isophorone	78-59-1	625	10
Naphthalene	91-20-3	625	10
Nitrobenzene	98-95-3	625	10
N-Nitrosodimethylamine	62-75-9	625	50
N-Nitrosodi-N-Propylamine	621-64-7	625	20
N-Nitrosodiphenylamine	86-30-6	625	20
Phenanthrene	85-01-8	625	10
Pyrene	129-00-0	625	10
1,2,4-Trichlorobenzene	120-82-1	625	10
GC/MS Fraction – Pesticides and PCBs *			QL µg/l
Aldrin	309-00-2	608	0.05
<i>α</i> -BHC	319-84-6	608	0.05
<i>β</i> -BHC	319-85-7	608	0.05
<i>γ</i> -BHC	58-89-9	608	0.05
<i>δ</i> -BHC	319-86-8	608	0.05
Chlordane	57-74-9	608	0.2
4,4'-DDT	50-29-3	608	0.1
4,4'-DDE	72-55-9	608	0.1
4,4' DDD	72-54-8	608	0.1
Dieldrin	60-57-1	608	0.1
<i>α</i> -Endosulfan	959988	608	0.1
<i>β</i> -Endosulfan	33213659	608	0.1
Endosulfan Sulfate	1031-07-8	608	0.1
Endrin	72-20-8	608	0.1
Endrin Aldehyde	7421-83-4	608	0.1
Heptachlor	76-44-8	608	0.05
Heptachlor Epoxide	1024-57-3	608	0.05
PCB-1242	53469-21-9	608	1.0
PCB-1254	11097-69-1	608	1.0
PCB-1221	11104-28-2	608	1.0
PCB-1232	11141-16-5	608	1.0
PCB-1248	12672-29-6	608	1.0
PCB-1260	11096-82-5	608	1.0
PCB-1016	12674-11-2	608	1.0

Pollutant	CAS Number (if available)	Analytical Protocol	Detection or Quantitation Level
Toxaphene	8001-35-2	608	5.0
Other parameters			mg/l
Alkalinity		SM 2320B(4b)	5
Hardness		200.7	5

- * “Total cyanide” and “GC/MS Fraction – Pesticides and PCBs” analyses are not required annually. They must be analyzed one time per permit cycle. Analysis must be conducted on the annual sample collected most immediately prior to submission of the permit renewal application.

The results of the first sample analyzed must be submitted to Ecology within twelve months of the permit effective date. Subsequent sample results must be submitted to Ecology within three months of each sampling event. The data must be listed in tabular form with the detection limit, the value including units, and the method.

S15. OUTFALL EVALUATION

The Permittee must inspect Outfall 001 in the forth year of this permit term. The inspection must include the submerged portion of the outfall line and diffuser to document its integrity and continued function. If conditions allow for a photographic or video verification, it must be included in the report. The inspection report must be submitted to Ecology within 60 days of inspection completion.

S16. STORMWATER DISCHARGE LIMITATIONS AND MONITORING

All stormwater runoff must be routed to the process wastewater treatment system and discharged through the Outfall 001. Any stormwater runoff from the mill site must be reported within 24 hours and a plan for corrective action submitted within 30 days.

GENERAL CONDITIONS

G1. SIGNATORY REQUIREMENTS

- A. All applications, reports, or information submitted to Ecology must be signed and certified.
- (a) In the case of corporations, by a responsible corporate officer.
For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- (b) In the case of a partnership, by a general partner.
- (c) In the case of sole proprietorship, by the proprietor.
- (d) In the case of a municipal, state, or other public facility, by either a principal executive officer or ranking elected official.
- Applications for permits for domestic wastewater facilities that are either owned or operated by, or under contract to, a public entity must be submitted by the public entity.
- B. All reports required by this permit and other information requested by Ecology must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
1. The authorization is made in writing by a person described above and submitted to Ecology.
 2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)
- C. Changes to authorization. If an authorization under paragraph B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph B.2 above must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.
- D. Certification. Any person signing a document under this section must make the following certification:

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

G2. RIGHT OF INSPECTION AND ENTRY

The Permittee must allow an authorized representative of Ecology, upon the presentation of credentials and such other documents as may be required by law:

- A. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit.
- B. To have access to and copy - at reasonable times and at reasonable cost - any records required to be kept under the terms and conditions of this permit.
- C. To inspect - at reasonable times - any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.
- D. To sample or monitor - at reasonable times - any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

G3. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the Permittee) or upon Ecology's initiative. However, the permit may only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR 122.62, 122.64 or WAC 173-220-150 according to the procedures of 40 CFR 124.5.

- A. The following are causes for terminating this permit during its term, or for denying a permit renewal application:
 - 1. Violation of any permit term or condition.
 - 2. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.
 - 3. A material change in quantity or type of waste disposal.
 - 4. A determination that the permitted activity endangers human health or the environment or contributes to water quality standards violations and can only be regulated to acceptable levels by permit modification or termination [40 CFR part 122.64(3)].

5. A change in any condition that requires either a temporary or permanent reduction or elimination of any discharge or sludge use or disposal practice controlled by the permit [40 CFR part 122.64(4)].
 6. Nonpayment of fees assessed pursuant to RCW 90.48.465.
 7. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.
- B. The following are causes for modification but not revocation and reissuance except when the Permittee requests or agrees:
1. A material change in the condition of the waters of the state.
 2. New information not available at the time of permit issuance that would have justified the application of different permit conditions.
 3. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.
 4. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.
 5. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR Part 122.62.
 6. Ecology has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.
 7. Incorporation of an approved local pretreatment program into a municipality's permit.
- C. The following are causes for modification or alternatively revocation and reissuance:
1. Cause exists for termination for reasons listed in A1 through A7, of this section, and Ecology determines that modification or revocation and reissuance is appropriate.
 2. Ecology has received notification of a proposed transfer of the permit. A permit may also be modified to reflect a transfer after the effective date of an automatic transfer (General Condition G8) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new Permittee.

G4. REPORTING PLANNED CHANGES

The Permittee must, as soon as possible, but no later than sixty (60) days prior to the proposed changes, give notice to Ecology of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in: 1) the permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b); 2) a significant change in the nature or an increase in quantity of pollutants discharged; or 3) a significant change in the Permittee's sludge use or disposal practices. Following such notice, and the submittal of a new application or supplement to the existing application, along with required engineering plans and reports, this permit may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation.

G5. PLAN REVIEW REQUIRED

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications must be submitted to Ecology for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications must be submitted at least one hundred eighty (180) days prior to the planned start of construction unless a shorter time is approved by Ecology. Facilities must be constructed and operated in accordance with the approved plans.

G6. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in this permit must be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G7. TRANSFER OF THIS PERMIT

In the event of any change in control or ownership of facilities from which the authorized discharge emanate, the Permittee must notify the succeeding owner or controller of the existence of this permit by letter, a copy of which must be forwarded to Ecology.

A. Transfers by Modification

Except as provided in paragraph B below, this permit may be transferred by the Permittee to a new owner or operator only if this permit has been modified or revoked and reissued under 40 CFR 122.62(b)(2), or a minor modification made under 40 CFR 122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

B. Automatic Transfers

This permit may be automatically transferred to a new Permittee if:

1. The Permittee notifies Ecology at least 30 days in advance of the proposed transfer date.
2. The notice includes a written agreement between the existing and new Permittee's containing a specific date transfer of permit responsibility, coverage, and liability between them.
3. Ecology does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under the subparagraph may also be minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement.

G8. REDUCED PRODUCTION FOR COMPLIANCE

The Permittee, in order to maintain compliance with its permit, must control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

G9. REMOVED SUBSTANCES

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters must not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

G10. DUTY TO PROVIDE INFORMATION

The Permittee must submit to Ecology, within a reasonable time, all information which Ecology may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee must also submit to Ecology upon request, copies of records required to be kept by this permit.

G11. OTHER REQUIREMENTS OF 40 CFR

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

G12. ADDITIONAL MONITORING

Ecology may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

G13. PAYMENT OF FEES

The Permittee must submit payment of fees associated with this permit as assessed by Ecology.

G14. PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit is deemed guilty of a crime, and upon conviction thereof will be punished by a fine of up to ten thousand dollars (\$10,000) and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs is a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit must incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars (\$10,000) for every such violation. Each and every such violation is a separate and distinct offense, and in case of a continuing violation, every day's continuance is deemed to be a separate and distinct violation.

G15. UPSET

Definition – “Upset” means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that: 1) an upset occurred and that the Permittee can identify the cause(s) of the upset; 2) the permitted facility was being properly operated at the time of the upset; 3) the Permittee submitted notice of the upset as required in condition S3.E; and 4) the Permittee complied with any remedial measures required under S4.C of this permit.

In any enforcement proceedings the Permittee seeking to establish the occurrence of an upset has the burden of proof.

G16. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

G17. DUTY TO COMPLY

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

G18. TOXIC POLLUTANTS

The Permittee must comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

G19. PENALTIES FOR TAMPERING

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit will, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this Condition, punishment will be a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four (4) years, or by both.

G20. REPORTING ANTICIPATED NON-COMPLIANCE

The Permittee must give advance notice to Ecology by submission of a new application or supplement thereto at least one hundred and eighty (180) days prior to commencement of such discharges, of any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility or activity which may result in noncompliance with permit limits or conditions. Any maintenance of facilities, which might necessitate unavoidable interruption of operation and degradation of effluent quality, must be scheduled during non-critical water quality periods and carried out in a manner approved by Ecology.

G21. REPORTING OTHER INFORMATION

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to Ecology, such facts or information must be submitted promptly.

**G22. REPORTING REQUIREMENTS APPLICABLE TO EXISTING
MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURAL
DISCHARGERS**

The Permittee belonging to the categories of existing manufacturing, commercial, mining, or silviculture must notify Ecology as soon as they know or have reason to believe:

- A. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following “notification levels:”
 - 1. One hundred micrograms per liter (100 µg/L).
 - 2. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony.
 - 3. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
 - 4. The level established by the Director in accordance with 40 CFR 122.44(f).
- B. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following “notification levels:”
 - 1. Five hundred micrograms per liter (500µg/L).
 - 2. One milligram per liter (1 mg/L) for antimony.
 - 3. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
 - 4. The level established by the Director in accordance with 40 CFR 122.44(f).

G23. COMPLIANCE SCHEDULES

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit must be submitted no later than fourteen (14) days following each schedule date.